

## THE WEATHER OF THE ATLANTIC AND PACIFIC OCEANS

(By the Marine Division, W. F. McDonald in charge)

## NORTH ATLANTIC OCEAN

By W. F. McDONALD

*Atmospheric pressure.*—The Atlantic HIGH during October, 1932, was especially stable from the Azores eastward over the Iberian Peninsula and northwestern Africa. This condition is reflected in the average pressure for the month (see Table 1), which was more than a tenth of an inch above normal over the middle and southeastern Atlantic.

TABLE 1.—Averages, departures, and extremes of atmospheric pressure (sea level) at selected stations for the North Atlantic and its shores, October, 1932

| Stations                       | Average pressure | Departure from normal | High-est | Date       | Lowest | Date |
|--------------------------------|------------------|-----------------------|----------|------------|--------|------|
|                                | Inches           | Inch                  | Inches   |            | Inches |      |
| Julianehaab, Greenland.....    | 29.85            | —0.07                 | 30.50    | 1          | 29.49  | 14   |
| Reykjavik, Iceland.....        | 29.61            | —0.25                 | 30.25    | 3          | 29.11  | 20   |
| Lerwick, Shetland Islands..... | 29.54            | —0.13                 | 30.03    | 5          | 28.94  | 14   |
| Valencia, Ireland.....         | 29.78            | +0.07                 | 30.24    | 4          | 29.10  | 8    |
| Lisbon, Portugal.....          | 30.09            | +0.12                 | 30.34    | 23         | 29.90  | 9    |
| Madeira.....                   | 30.11            | +0.17                 | 30.37    | 24         | 29.93  | 3    |
| Horta, Azores.....             | 30.28            | +0.03                 | 30.49    | 24         | 29.84  | 21   |
| Belle Isle, Newfoundland.....  | 29.84            | 0.00                  | 30.52    | 25         | 29.00  | 23   |
| Halifax, Nova Scotia.....      | 30.04            | —0.02                 | 30.46    | 26         | 29.28  | 22   |
| Nantucket.....                 | 30.03            | —0.01                 | 30.45    | 25         | 29.51  | 11   |
| Hatteras.....                  | 30.05            | —0.05                 | 30.36    | 8          | 29.65  | 17   |
| Bermuda.....                   | 30.02            | —0.02                 | 30.22    | 30, 31     | 29.56  | 11   |
| Turks Island.....              | 29.93            | —0.02                 | 30.04    | 29, 30     | 29.84  | 20   |
| Key West.....                  | 29.93            | —0.01                 | 30.10    | 31         | 29.71  | 16   |
| New Orleans.....               | 30.00            | —0.03                 | 30.28    | 28         | 29.41  | 16   |
| Cape Gracias, Nicaragua.....   | 29.82            | —0.10                 | 29.92    | 29, 30, 31 | 29.72  | 10   |

NOTE.—All data based on a. m. observations only, with departures computed from best available normals related to time of observations, except Hatteras, Key West, Nantucket, and New Orleans, which are 24-hour corrected means.

A large deficiency in average pressure occurred in the vicinity of Iceland and the British Isles, with the average at Lerwick, Shetland Islands, a fourth of an inch below

normal. There was, similarly, a noteworthy deficiency at Cape Gracias, where the monthly pressure revealed a departure of unusual degree for that region, in that the average for the month was a tenth of an inch below normal. This resulted from the slow movement of a mild disturbance of tropical origin, which is described more fully below.

*Cyclones and gales.*—October was not a month of severe weather over the Atlantic. Extratropical cyclones were for the most part confined to the more northern tracks. Moderate to fresh gales occurred at scattered places along the main trans-Atlantic steamer lanes on more than half the days of the month but were most frequent and widespread with the advance of the season toward the end of the month.

On the 17th a disturbance took definite form in a previously existent trough of low pressure over mid-ocean, moved slowly northeastward past the Azores during the four days that followed, and caused the strongest gale reported from the Atlantic area during the month. On the 19th the Dutch S. S. *Deucalion* (G. van der Kooy, master) encountered a north-northeast gale of force 11 near latitude 37° N., longitude 45° W.

*Tropical disturbances.*—Only one, relatively weak, tropical disturbance of West Indian origin occurred, between the 7th and 18th, as described on page 193 of this REVIEW.

This disturbance reached greatest intensity in the northern Gulf of Mexico, where ships' observers reported gales of force 8 to 9 Beaufort.

*Fog.*—Fog was not reported south of the forty-fifth parallel except near the American coast. Comparatively few days had fog, even on the northern steamer lanes, the maximum prevalence being over the Grand Banks, where this condition was reported on 8 days, the average number of days of occurrence being only 3 to 5 elsewhere.

## OCEAN GALES AND STORMS, OCTOBER, 1932

| Vessel                          | Voyage        |                   | Position at time of lowest barometer |           | Gale began | Time of lowest barometer | Gale ended | Lowest barometer | Direction of wind when gale began | Direction and force of wind at time of lowest barometer | Direction of wind when gale ended | Direction and highest force of wind | Shifts of wind near time of lowest barometer |
|---------------------------------|---------------|-------------------|--------------------------------------|-----------|------------|--------------------------|------------|------------------|-----------------------------------|---|-----------------------------------|-------------------------------------|--|
|                                 | From—         | To—               | Latitude                             | Longitude |            |                          |            |                  |                                   |   |                                   |                                     |  |
| NORTH ATLANTIC OCEAN            |               |                   |                                      |           |            |                          |            |                  |                                   |   |                                   |                                     |  |
| Wytheville, Am. S. S.           | Antwerp       | Baltimore         | 49 05 N                              | 40 06 W   | Oct. 1     | Noon, 1                  | Oct. 1     | 30.22            | SE                                | SE, 7   | NW                                | —, 9                                | S-W-NW.                                      |
| Costa Rica, Du. S. S.           | Dover         | Barbados          | 26 29 N                              | 47 44 W   | Oct. 2     | 4 p., 2                  | Oct. 3     | 30.02            | SE                                | SSE, 8  | S                                 | SE, 8                               | SE-S-SE.                                     |
| J. A. Moffett, jr., Am. M. S.   | Boston        | Corpus Christi.   | 26 34 N                              | 91 30 W   | Oct. 5     | 4 a., 5                  | Oct. 5     | 29.92            | N                                 | N, 7  | N                                 | N, 8                                | NW-N.  |
| Nitonian, Br. S. S.             | Kingston      | Vera Cruz         | Off Vera Cruz                        |           | —do—       | 10 a., 5                 | Oct. 6     | 29.94            | W                                 | NNW, —  | NNW                               | —, 10                               | W-NNW.                                       |
| Virginia, Hond. S. S.           | Boston        | Jamaica           | 42 18 N                              | 70 35 W   | Oct. 6     | 9 p., 6                  | Oct. 8     | 29.67            | SSW                               | SSW, 6  | WNW                               | W, 8                                | SW-W.  |
| Afoundria, Am. S. S.            | Glasgow       | Panama City, Fla. | 51 20 N                              | 20 53 W   | Oct. 7     | 2 a., 7                  | —do—       | 29.44            | WSW                               | WSW, 8  | NW                                | NW, 9                               | —  |
| Am. Importer, Am. S. S.         | Hamburg       | New York          | 50 00 N                              | 13 30 W   | —do—       | 4 a., 8                  | Oct. 9     | 29.17            | SSW                               | WNW, 7  | W                                 | SSW, 9                              | SSW-WNW.                                     |
| San Bruno, Pan. S. S.           | Tela          | Boston            | 17 00 N                              | 86 58 W   | Oct. 9     | 4 p., 9                  | Oct. 10    | 29.64            | SSW                               | SW, 6   | E                                 | ESE, 8                              | SSW-SSE.                                     |
| Musa, Pan. S. S.                | Puerto Cortez | New York          | 20 09 N                              | 86 19 W   | —do—       | 10 p., 9                 | —do—       | 29.74            | ESE                               | ESE, 7  | ENE                               | E, 8                                | —  |
| Kenbane Head, Br. S. S.         | Montreal      | Belfast           | 55 32 N                              | 22 06 W   | Oct. 6     | 8 a., 9                  | —do—       | 29.53            | NW                                | NNW, 9  | N                                 | —, 9                                | NNW-N.                                       |
| Scapenn, Am. S. S.              | Copenhagen    | Wilmington, Del.  | 57 53 N                              | 8 10 E    | Oct. 8     | 10 a., 9                 | Oct. 9     | 29.18            | ESE                               | SE, 7   | SE                                | SE, 9                               | SE-E.  |
| Am. Importer, Am. S. S.         | Hamburg       | New York          | 49 50 N                              | 31 41 W   | Oct. 10    | Noon, 10                 | Oct. 10    | 29.68            | W                                 | W, 8  | N                                 | NW, 10                              | —  |
| West Imboden, Am. S. S.         | New York      | Rio de Janeiro    | 31 05 N                              | 61 24 W   | Oct. 9     | 4 a., 10                 | —do—       | 29.63            | NE                                | SW, 5   | SW                                | ENE, 9                              | ENE-SW.                                      |
| El Estero, Am. S. S.            | Galveston     | Boston            | 41 30 N                              | 69 30 W   | Oct. 12    | Mdt., 12                 | Oct. 13    | 29.67            | NW                                | NW, 8   | NW                                | —, 8                                | Steady.                                      |
| Duquesne, Am. S. S.             | Rotterdam     | New Orleans       | 45 50 N                              | 16 13 W   | —do—       | —do—                     | Oct. 12    | 29.88            | N                                 | N, 7  | N                                 | N, 8                                | Do.  |
| Chester Valley, Am. S. S.       | Galveston     | Genoa             | 38 56 N                              | 54 19 W   | Oct. 10    | 6 a., 12                 | —do—       | 29.67            | E                                 | S, 6  | SSE                               | SE, 8                               | —  |
| Wm. Boyce Thompson, Am. S. S.   | Marcus Hook   | Houston           | 28 40 N                              | 91 15 W   | Oct. 15    | 4 p., 15                 | Oct. 16    | 29.50            | SSE                               | SSE, 4  | NW                                | NNW, 8                              | —  |
| Cornal, Am. S. S.               | New Orleans   | Tampa             | 28 48 N                              | 88 52 W   | —do—       | 2 a., 16                 | Oct. 17    | 29.39            | —                                 | SSW, 8  | SW                                | SW, 9                               | Steady.                                      |
| El Almirante, Am. S. S.         | —do—          | New York          | 31 00 N                              | 79 00 W   | Oct. 16    | 2 a., 16                 | Oct. 18    | 29.69            | SE                                | SE, 8   | SE                                | —, 9                                | Do.  |
| Memphis City, Am. S. S.         | New York      | Canal Zone        | 34 00 N                              | 74 00 W   | —do—       | 4 p., 17                 | Oct. 17    | 29.79            | SE                                | SSE, 8  | SW                                | SE, 9                               | SE-SW.                                       |
| Greystoke Castle, Br. M. S.     | Port Said     | New York          | 36 55 N                              | 44 20 W   | Oct. 17    | 4 p., 17                 | Oct. 18    | 29.89            | Var                               | N, 4  | N                                 | N, 9                                | Steady.                                      |
| Exeter, Am. S. S.               | New York      | Palma             | 39 58 N                              | 70 10 W   | Oct. 19    | 2 a., 19                 | Oct. 23    | 29.71            | SE                                | E, 3  | SW                                | SE, 9                               | —  |
| Deucalion, Du. S. S.            | Haiti         | Havre             | 36 46 N                              | 44 58 W   | Oct. 17    | 4 a., 19                 | Oct. 20    | 29.51            | NNE                               | NNE, 11   | NNE                               | NNE, 11                             | Steady.                                      |
| Seanyork, Am. S. S.             | Copenhagen    | Philadelphia      | 56 52 N                              | 24 52 W   | Oct. 19    | 11 a., 19                | —do—       | 28.91            | SE                                | WNW, 9  | W                                 | W, 9                                | SE-S-W.                                      |
| Flandre, Fr. S. S.              | St. Nazaire   | Central America   | 44 00 N                              | 30 00 W   | Oct. 21    | 11 p., 21                | Oct. 22    | 29.49            | SW                                | SW, 8   | NW                                | SW, 8                               | SW-NW.                                       |
| City of Newport News, Am. S. S. | Havre         | Baltimore         | 40 00 N                              | 51 00 W   | Oct. 22    | 8 a., 22                 | —do—       | 29.59            | S                                 | S, 9  | NW                                | —, 9                                | S-NW.  |